NOTE: The following are examples of general categories and specific types of Cost-Wise Readiness as well as other Cost Reduction Initiatives. It was developed from an analysis of past initiative submittals. It is intended for use by program managers, IPTs, and cost analysts. In general, it is for any player in the acquisition process who is searching for initiatives to reduce Total Ownership Cost. It's simply a tool to stimulate ideas on potential Cost Reduction Initiatives.

CATEGORIES AND TYPES OF COST-WISE READINESS AND SIMILAR COST REDUCTION INITIATIVES

A. Engineering Change Proposals (Equipment Redesign)

1) Modify a utility hydraulic system pressure gauge to avoid a freezing problem, reducing the need for repairs.
2) Prototype an improved ammunition belt that will reduce gun failure.
3) Replace a quick wearing material on an arresting gear with a more durable material.
4) Improve an electrical system by replacing 3 single-phase circuit breakers with one three-phase circuit breaker with greater overall reliability.
5) Redesign an aircraft battery to reduce weight and increase the battery's service life.
6) Replace an existing old-design propeller with a new commercially available design which has improved reliability.
7) Perform tests and analysis to qualify the design of a new slipper seal for nose landing gear struts which will decrease maintenance time and reduce AVDLR costs.
8) Redesign a leading edge flap motor to increase reliability.
9) Replace the current lens coating on laser eye protection equipment with a new, harder coating, thereby extending service life.
10) Eliminate the current carrier barricade engine system and replace it with a single use system of nylon netting and energy absorption, eliminating the need for periodic inspections and maintenance.

B. Reliability Improvements Through Maintenance Changes

1) Establish an intermediate-level repair capability for a missile electrical umbilical cable instead of depot level maintenance.
2) Establish an I-level capability for repair of propeller pump housing by purchasing pump housing test stands.
3) Increase O-level inspection capability by developing and giving new training in order to reduce false removals.
4) Replace existing unreliable Automatic Wiring Test equipment with a new and improved system to increase reliability and maintainability.
5) Improve efficiency of intermediate maintenance by consolidating six AIMDs into two.
6) Develop new maintenance procedures and special tools to enable repair of several avionics systems without removal of the units.
7) Establish organic depot repair capability for several low demand avionics items instead of maintaining an increasingly expensive contractor repair.
8) Consolidate the repair of a related group of electrical components at a single site, organic or contractor instead of the current three sites.
9) Improve O-level maintenance capability by developing new procedures and increasing training.
10) Conduct study to see if ejection inspection intervals can be safely increased.

C. **Obsolescence Avoidance**

1) Replace an obsolete avionics system with a more reliable NDI COTS system.
2) Replace three obsolete building blocks on an avionics ATE system with a single, state-of-the-art, commercial unit.
3) Conduct a study of an aircraft to detect impending obsolescent items.
4) Replace an obsolete and unsupportable cockpit instrumentation suite.
5) Expand the scope of an existing replacement of obsolete avionics to all active aircraft in the T/M/S.
6) Insert COTS hardware and new emulation software technology into an aged, obsolete mission computer.
7) Effect a change in repair procedure to a fuel transfer line in an inner wing assembly that can no longer be replaced.
8) Develop prognostic tools to predict, identify and manage the obsolescence of avionics components in aging aircraft.
9) Implement component modifications and improvements that will allow use of currently available source to test and repair an out-of–production magnetic anomaly detector.
10) Replace aging components of a landing control system.

D. Engine Related Initiatives

1) Replace an expensive and hazardous chemical based method of stripping engine turbine blades with a less expensive process, using abrasives.
2) Improve test procedures for determining the sources of engine vibration by acquiring an off the shelf vibration spectrum analyzer.
3) Acquire a COTS air engine start system for an AIMD to increase production and reduce backlog.
4) Do a long lead advance procurement of engine parts directly form the supplier to obtain savings due to volume and surcharge avoidance.
5) Reduce engine leakage by redesign of oil pressure scavenger tubes.
6) Redesign of a turbine casing with a more durable material to reduce case cracking.
7) Undertake an effort to develop and implement engine vibration analysis as an effective and reliable tool for study and resolution of vibration related problems.
8) Implement an external oil filtration system at I level to clean engine oil.
9) Develop a server/browser computer application to automate access to a database of engine/propulsion information.
10) Use thermal imaging technology to improve engine diagnostics and reduce removals.

E. Test Program Set (TPS)/Software Development/Change

1) Develop a TPS for a power supply to establish repair capability for an item that is currently non-repairable.
2) Modify an existing TPS for an audio tape recorder to reduce instances of depot repair.
3) Develop TPSs for 4 WRAs to establish organic repair capability.
4) Link maintenance training with maintenance actions through the use of interactive software.
5) Transfer several TPSs from HATS to CASS

6) Add new test capability to CASS for a generator control unit.
7) Reconfigure Oxygen System Components Test stands from analog presentation to direct digital read out.
8) Continue a NRE effort for TPSs for a HUD and airborne data recorder.
9) Develop software to support common vibration analysis support equipment.
10) Support software changes to CASS TPSs.

F. Publications/Publications Updates

1) Update Naval Aircraft Wiring Tech Manuals to include the latest practices and newest aircraft.
2) Review drawings and other tech information to determine possible candidates for COTS procurements.
3) Develop and publicize repair procedures for corrosion on the catapult barrel assembly.
4) Transfer tech pubs and drawings to digital media, accessible by PC and hand held computer devices.
5) Update and digitalize all pubs for a certain T/M/S AC into CD-ROM and Word formats.
6) Use digitized media to streamline and better coordinate tech manual updates.
7) Conduct a source data review and update SERMIS for a T/M/S AC to eliminate outdated and redundant SERDs.
8) Replace current paint based labeling process with computer generated vinyl stencils and labels.
9) Convert paper documents in the tech manual depository archive to digital media.
10) Implement an improved process for preparing, evaluating, approving and implementing bulletin tech directives.

G. Maintenance Process Changes (e.g., Concepts Such as Hot Buttons, Changes to Tracking system, etc.)

1) Replace a fluid peculiar to arresting gear with a COTS fluid that is more common, less costly and is recyclable.
2) Conduct a study to determine if corrosion inspection intervals can be lengthened in non-corrosive environments.
3) Modify salvage criteria for certain nose landing gear parts to reduce rejection of salvageable parts.
4) Improve troubleshooting procedures for propeller housings to reduce the number of BCMs that do not actually require repair.
5) Put Schedule Removal Cards on a contact memory button, thereby eliminating unnecessary maintenance caused by the loss of cards.
6) Improve tracking information on special tooling to include data on tool function so that tooling can be more readily reused.
7) Re-engineer AIMD repair procedures utilizing the latest human factors information and technology to reduce workload and possibly billets required.
8) Use interactive courseware to reduce training time and the training pipeline for maintenance personnel.
9) Install the Huntron Tracker monitor to enable testing of sub-SRA components that are currently non-repairable.
10) Improve a tracking and condition monitoring system using new hardware and software.